ABSTRACT OF THE DISCLOSURE

A material for passive electronic components having a high thermal conductivity, low density and low coefficient of expansion. The material is an isotropic composite comprising a porous ceramic body formed by particles of green silicon carbide or polygranular graphite and a metal filling the porosities of the ceramic body and comprising aluminum, an aluminum alloy, magnesium or a magnesium alloy. The ceramic body forms about 50 to 90% by volume of the material, with the ceramic body and metal forming two randomly oriented interpenetrating networks of a ceramic phase and a metallic phase.

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